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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/073,329	02/13/2002	Peter Kenneth Attwood	19111.0072	4553
23517 7590 05/03/2007 BINGHAM MCCUTCHEN LLP 2020 K Street, N.W. Intellectual Property Department WASHINGTON, DC 20006			EXAMINER TRUONG, LECHI	
			ART UNIT 2194	PAPER NUMBER
			MAIL DATE 05/03/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	Application No. 10/073,329	Applicant(s) ATTWOOD, PETER KENNETH	
	Examiner LeChi Truong	Art Unit 2194	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 21 February 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

  
**WILLIAM THOMSON**  
 SENIOR PATENT EXAMINER

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

1. Claims 1-9 are presented for the examination.

#### ***Claim Rejections - 35 USC § 101***

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

2. Claims 5-7 are rejected under 35 U.S.C. 101 because they are directed to non-statutory subject matter.
3. Claims 5-7 are non-statutory because it is software per se embodied in a manner so as to be executable as the only hardware is in an intended use statement.

Claim 5 defines "Database system" in the preamble and the body of the claim recites "first/second self-contained", "software routine". First/second self-contained, software routines appear to be software modules, which are not tangible. Therefore, claim 5 is non-statutory because it recites a system claim that comprises software per se embodiments.

#### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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4. Claims 1, 2, 4-5, 7-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zimmerman (Method of Dynamically Appending A Library to an Active Running Program) in view of Arai et al (US 6,718,543 B2).

5. As to claim 1, Zimmerman teaches the invention substantially as claimed including: a first data handling application (the application program, para [0005], ln 3-7 to para [0005], ln 7-10), a second data handling application (the dynamic library, para [0005], ln 3-7 to para [0005], ln 7-10), call routine (a function call, para [0005], ln 7-10), at least one call routine which is executed when the second data handling application is operated (para [0001], ln 8-12), a software routine (call library routine to perform functions, para[0001], ln 1-8), determining the presence of the second data handling application and, if it is present generating a link to a software routine( The static library 30 passes application calls through to a found DLL. The DLL, in contrast, actually implements all of the API calls of the application, para [0021], ln 4-10), If the DLL is missing or determined to be incorrect version (ie., no supporting DLL is found) 56, the application interface return 64.... At this point, the calling application may ask the user if the updated DLL should be downloaded... download the update DLL from the Web server 14... The application interface 40 then transfers calls directed to a method within the object on the DLL interface 42, which passes the calls on to the updated DLL 32(now DLL 32, once stored on the user's machine, para [0025], ln 1-17/ right col 4, ln 41-49/ para [0045], ln 40-48), which will be executed by the call routine in the second data handling application (para [0001], ln 1-12).

6. Zimmerman does not explicitly teach self-contained data, appending an address for the software routine configured to execute when the at least one call routine for the second,

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previously installed, utilizing the software routine when executed. However, Arai teaches self-contained data (a single self-contained program, col 1, ln 64-66), appending an address for the software routine configured to execute when the at least one call routine for the second, previously installed, utilizing the software routine when executed (load address from this table for each library routine call, col 2, ln 1-3/ loading the routine's address, which is generally time consuming. Accordingly, routines in shared libraries generally execute, col 1, ln 49-53/ address location for executable code in a copied routine, col 4, ln 1-10/ If the versions of routines needed by a task do not match those which have been copied into existing optimized programs, the system may choose to load the unoptimized application program and call the appropriate shared libraries, col 4, ln 25-30/ if the shared library versions do not match, the loader 101 preferably loads an unoptimized application program that will employ ordinary shared library calls, col 7, ln 52-56/ routines in shared libraries generally execute more slowly than equivalent routines initially incorporated into the application program, col 1, ln 52-54).

7. It would have been obvious to one of the ordinary skill in the art at the time the invention was made to modify the teaching of Zimmerman to incorporate the feature of self-contained data, appending an address for the software routine configured to execute when the at least one call routine for the second, previously installed, utilizing the software routine when executed because this provide benefit from the availability of compile time optimization and the need for re-usable library routines to execute rapidly.

8. As to **claim 2**, Zimmerman teaches source code defining the software routine for automatic implementation by the second data handling application (para [0001], ln 8-12).

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9. As to **claim 4**, Zimmerman teaches the call routine is only implemented by the second data handling application under certain predetermined conditions (para [0045], ln 40-50, if the library is present, passing the function call to the library for execution).

10. As to **claims 5, 7- 9**, they are apparatus claims of claims 1, 2, 4; therefore, they are rejected for the same reasons as claims 1, 2, 4 above.

11. Claims 3, 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zimmerman (Method of Dynamically Appending A Library to an Active Running Program) in view of Arai et al (US 6,718,543 B2), as applied to claim 1 above, and further in view of Burns et al (US Patent 6,088,694).

12. As to **claim 3**, Zimmerman and Arai do not explicit teach the software routine controls a data modification operation by the second data handling application in dependence upon data stored in the first data handling application. However, Burns teaches the software routine controls a data modification operation by the second data handling application in dependence upon data stored in the first data handling application (an application user of the computing system 10 issues an SQL Insert, SQL delete, or SQL update call in the database, the DBMS detects that this operation occur on a column of type datalink, col 9, ln 1-5).

It would have been obvious to one of the ordinary skill in the art at the time the invention was made to combine the teaching of Zimmerman, Arai and Burns because Burns's the software routine controls a data modification operation by the second data handling application in dependence upon data stored in the first data handling application would improve the

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flexibility of Zimmerman and Arai's systems by allowing efficiency managing access and control over data that is linked to a database system.

**13.** As to claim 6, it is an apparatus claim of claim 3; therefore, it is rejected for the same reason as claim 3 above.

### *Conclusion*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LeChi Truong whose telephone number is (571) 272 3767. The examiner can normally be reached on 8 - 5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomson, William can be reached on (571) 272 3718. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIP. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIP system, contact the Electronic Business Center (EBC) at 866-217-9197(toll-free).

LeChi Truong

April 30, 2007

  
WILLIAM THOMSON  
SUPERVISORY PATENT EXAMINER